

a' 1 (1.) (Amended) A positioning system comprising:  
2 a receiver configured to receive positioning signals;  
3 a processor ~~[configure]~~ configured to process the positioning signals ~~[in]~~  
4 using a real time [manner to] process and generate positioning data based on  
5 the processed positioning signals, the positioning data being stored in a first  
6 location specific to the real time process;  
7 user application code executed by the processor, said user application  
8 code configured to access the positioning data in a second location specific to  
9 the user application code, the second location being a different location from  
10 the first location; and  
11 a firewall established between the processor and the user application  
12 code, said firewall configured to prevent the user application code from  
13 corrupting positioning data in the first location and enables the processor to  
14 process the positioning signals in real time without interference by the user  
15 application code.

1 2. (Amended) The positioning system as set forth in claim 1,  
2 further comprising an application programming interface (API), said API  
3 configured to access the positioning data in the second location as instructed by  
4 the user application code.

1 3. The positioning system as set forth in claim 2, wherein the API  
2 comprises a plurality of objects.

1 4. The positioning system as set forth in claim 1, wherein the  
2 processor executes a real time operating system (RTOS).

1           5.     The positioning system as set forth in claim 1, wherein the firewall  
2 comprises a virtual machine.

1           6.     The positioning system as set forth in claim 1 wherein the  
2 processor comprises positioning code executed by the processor and the  
3 firewall comprises setting the positioning code to a higher priority than the user  
4 application code.

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1           (7.)    (Amended) In a positioning system, a method for processing  
2 positioning signals comprising the steps of:  
3           receiving positioning signals;  
4           processing the positioning signals [in] using a real time [manner] process  
5 to generate positioning data, the positioning data being stored in a first location  
6 specific to the real time process;  
7           accessing the positioning data through a firewall using a second location  
8 that prevents an access from corrupting positioning data in the first location  
9 and interfering with the processing of the positioning signals, the second  
10 location being a different location than the first location; and  
11           processing the positioning data from the second location to generate user  
12 application data.

1           8.     The method as set forth in claim 7, wherein the step of processing  
2 the positioning signals is performed using a real time operating system (RTOS).

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1 9. (Amended) The method as set forth in claim 7, wherein the  
2 firewall comprises a virtual machine, said step of accessing comprising the  
3 steps of:  
4 issuing instructions to the virtual machine;  
5 said virtual machine receiving the issued instructions and performing  
6 the access in accordance with the issued [instruction] instructions.

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1 10. The method as set forth in claim 7, wherein the firewall comprises  
2 the steps of processing the positioning signals at a higher priority than the  
3 accessing and processing the positioning data.

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1 (11.) (Amended) A computer readable medium containing executable  
2 instructions which, when executed in a processing system, causes the system to  
3 perform steps for processing positioning information, comprising:  
4 receiving positioning signals;  
5 processing the positioning signals [in] using a real time [manner]  
6 process to generate positioning data, the positioning data being stored in a first  
7 location specific to the real time process;  
8 accessing the positioning data through a firewall using a second location  
9 that prevents an access from corrupting positioning data in the first location  
10 and interfering with the processing of the positioning signals, the second  
11 location being a different location than the first location; and  
12 processing the positioning data from the second location to generate user  
13 application data.

a4 <sup>amended.</sup>

1 12. (Amended) The computer readable medium as set forth in claim  
2 11, wherein the instructions further comprise a virtual machine, said step of  
3 accessing comprising the steps of:  
4 issuing instructions to the virtual machine; and  
5 said virtual machine receiving the issued instructions and performing  
6 the access in accordance with the issued [instruction] instructions.

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1 13. The computer readable medium as set forth in claim 11, wherein the  
2 step of accessing comprises accessing the positioning data at a lower priority than  
3 processing the positioning signals.

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1 14. (New) The positioning system as set forth in claim 5, wherein the  
2 virtual machine provides a virtual address for the user application code to access  
3 the positioning data.

1 15. (New) The method as set forth in claim 9, further comprising the  
2 step of:  
3 providing a virtual address to access the positioning data.

1 16. (New) The computer readable medium as set forth in claim 13,  
2 wherein the instructions further comprise the step of:  
3 providing a virtual address to access the positioning data by the virtual  
4 machine.

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